

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for organizations to develop, test, execute and analyze messaging programs defining a message application server comprising:

(a) a dialog designer configured to provide a user interface to an organization's program designers and marketers, to allow for rapid messaging program creation, to offer provide the ability to select the a type of a messaging program, to select the a service addresses for a the messaging program, to schedule the messaging programs for execution, to upload messaging user data into lists, to create segments, to download messaging program result data, to test the messaging programs, to provide reports, including real-time reports, on the messaging programs;

(b) a dialog server configured to execute the messaging programs by means execution of a program messaging instructions, to manage substantially simultaneously executed messaging programs, to store messaging user results and message delivery status, to maintain state and session context across message invocations for messaging users within an messaging program; and

(c) a message exchange configured to route messages to and from messaging service providers, to manage service addresses, to perform message billing and to connected to messaging service providers;

whereby organizations can execute messaging programs interacting with messaging users by means of said via the messaging service providers.

2. (Currently Amended) A The system of claim 1, wherein a plurality of organizations hierarchically organized can independently develop, test, execute, and analyze messaging programs.

3. (Currently Amended) A The system of claim 1, wherein said the organizations are not messaging service providers.

4. (Currently Amended) A The system of claim 1, wherein ~~said the~~ message application service server is connected to a plurality of messaging service providers systems.

5. (Currently Amended) A The system of claim 1, wherein ~~said the~~ message application server is connected to the messaging service providers systems ~~by means of via~~ a data network, including, but not limited to, the Internet and private internet;, using a variety of messaging protocols, including but not limited to, Simple Mail transfer Protocol (SMTP), Short Message Peer-to-Peer Protocol (SMPP), and instant messaging.

6. (Currently Amended) A The system of claim 1, wherein ~~said the~~ message application server is connected to ~~said the~~ organizations ~~by means of via~~ a data network, including, but not limited to, the Internet and private intranets.

7. (Currently Amended) A The-system of claim 1, wherein the messaging users use messaging devices used by the messaging users use using a variety of messaging protocols including, but not limited to, Short Message Service (SMS), Enhanced Message Service (EMS), Multimedia Messaging Service (MMS), Wireless Application Protocol (WAP), HyperText Markup Language (HTML), eXtensible HyperText markup Language (xHTML), instant messaging, e-mail, interactive TV, and client side execution environments or any other messaging technology.

8. (Currently Amended) A The system of claim 1, wherein the messaging programs and instructions are designed using a graphical user interface (GUI) design tool and have a text based representation.

9. (Currently Amended) A The system of claim 1, further comprising a data database to store messaging program data; an opt-out system configured to store lists of users that have opted-out of messaging programs for a particular opt-out scope; a

billing system to rate the messaging programs; an address manager to create, configure, provision, and administer messaging program service addresses; and one or more message detail record databases to record all critical service level or billing events.

10. (Currently Amended) A The system of claim 9, wherein the data stored in said the data database is used in future messaging programs.

11. (Currently Amended) A The system of claim 1, wherein the organization accesses the dialog designer using a web browser from a remote computer ~~by means of~~ via a data network.

12. (Currently Amended) A The system of claim 1, wherein applications executed by the organization can interface with the message application server ~~by means of~~ via web service calls using protocols, including, but not limited to, Simple Object Access Protocol (SOAP).

13. (Currently Amended) A The system of claim 1, wherein the message application server is ~~integrated~~ configured to operate in conjunction with ~~said the~~ organizations systems, including, but not limited to, customer relationship management (CRM) systems. ("CRM").

14. (Currently Amended) A The system of claim 1, wherein the dialog server can access the messaging instructions from a remote computer systems connected to the dialog server ~~by means of~~ via a data network whereby integration with remote systems can be achieved.

15. (Currently Amended) A The system of claim 1, wherein the messaging instructions, includes, but is not limited to, messaging primitives, unconditional logic primitives, conditional logic primitives, session variable primitives, input/output primitives, remote connectivity primitives, whereby any messaging program of arbitrary

complexity can be developed and integrated with remote systems connected to a data network.

16. (Currently Amended) A The system of claim 1, wherein ~~said the~~ dialog server maintains session state and context across message invocations for a pair consisting of a messaging device address and a messaging program address.

17. (Currently Amended) A The system of claim 1, wherein ~~said the~~ dialog server, ~~said the~~ message exchange and the connection to the messaging service providers store messages into queues with flow control techniques whereby queue overload is prevented or mitigated.

18. (Currently Amended) A method for organizations to develop, execute and analyze messaging programs comprising ~~the steps of:~~:

- (a) an organization's program designers designing ~~said the~~ messaging program;
- (b) ~~said the~~ program designer selecting a segment for push programs;
- (c) ~~said the~~ program designers selecting ~~the a~~ program service addresses;
- (d) ~~said the~~ program designers testing ~~said the~~ messaging program, ~~iterating back to step (a) until satisfied;~~
- (e) executing ~~said the~~ messaging program where ~~said the~~ messaging program is either started manually or automatically at a scheduled date;
- (f) messaging users interacting with ~~said the~~ messaging program;
- (g) ~~and optionally capturing and storing~~ ~~said the~~ messaging users responses and other messaging user data in a data database;
- (g-h) stopping ~~said the~~ messaging program either manually or automatically at a scheduled date; and
- (h-i) analyzing ~~said the~~ messaging program using the data captured and stored during the program execution;
whereby organizations can execute messaging programs interacting with messaging users ~~by means of via~~ messaging service providers.

19. (Currently Amended) The method of claim 18, ~~whereby wherein~~ the data captured as part of executing a messaging program is used in a subsequent messaging program.

20. (Currently Amended) The method of claim 18, ~~whereby wherein~~ the segments are created from list data imported by the program designer into a data database, and from results data generated by the execution of prior messaging programs.

21. (Currently Amended) The method of claim 18, ~~whereby wherein said the~~ organizations deliver coupons, offers and promotions to ~~said the~~ messaging users.

22. (Currently Amended) The method of claim 18, further comprising ~~the steps~~ of storing important service level and billable events in one or more message detail record ("MDR") database(s).

23. (Currently Amended) The method of claim 22, further comprising ~~the steps~~ of ~~billing for messaging usage~~:

- (a) importing the message detail records generated by the message application server into a billing MDR database;
- (b) rating and billing ~~said the~~ message detail records;
- (c) generating organization invoices and service provider account payable reports;.

24. (Currently Amended) The method of claim 23, further comprising ~~the steps~~ of reconciling ~~the~~ service provider invoices for messaging transport costs with ~~the~~ service provider account payable reports generated from the message application server message detail records.

25. (Currently Amended) The method of claim 23, further comprising ~~the steps~~ of:

- (a) receiving message detail records generated in the messaging service provider system from the messaging service providers;
- (b) importing said the message detail records generated in the messaging service provider system into said the billing MDR database;
- (c) rating and billing said the message detail records generated in the messaging service provider system;
- (d) generating from the message detail records generated in the messaging service provider system service provider accounts payable reports; and
- (e) reconciling the accounts payable reports generated from said the message detailed records generated in the messaging service provider system with the accounts payable reports generated from by the message application server-MDR's.

26. (Currently Amended) A method for organizations to push messages to messaging users comprising the steps of:

- (a) creating a segment;
- (b) starting a messaging program;
- (c) executing a bulksend in a dialog server which retrieves the messaging users messaging device addresses and data defined in the segment created in step (a), and filtering out the messaging device addresses of users that have opted-out, the filtering out to result in the users that have opted out not receiving the push messages;
- (d) executing a messaging program instruction in said the dialog server messaging program instructions for each messaging device address originating from said the bulksend;
- (e) assuming the messaging program instructions include sending a message to said messaging device, routing said the push message to a message exchange to be sent to the appropriate messaging service provider system, and storing any message status delivery returned to said the message exchange;
whereby said the messaging users whose messaging device addresses is are in said the segment receives a push message.

27. (Currently Amended) A method for organizations to deploy pull messaging programs comprising ~~the steps of~~:

(a) receiving in a message exchange a messaging device originated message from a messaging user messaging device by means of said via a messaging device messaging service provider systems, the messaging device originated message is of any one of a variety of messaging protocols including, but not limited to, Short Message Service (SMS), Enhanced Message Service (EMS), Multimedia Messaging Service (MMS), Wireless Application Protocol (WAP), HyperText Markup Language (HTML), eXtensible HyperText markup Language (xHTML), instant messaging, e-mail, interactive TV;

(b) forwarding said the messaging device originated message from said the message exchange to a dialog server;

(c) looking up the appropriate session context and pull messaging program based on the messaging device address and the program service address;

(d) executing the pull messaging program instructions in said the dialog server upon receiving said the messaging device originated message and based on the session state and context;

(e) assuming the messaging program instructions include sending a reply message to said messaging device, routing said the messaging device originated message in said the message exchange to the appropriate messaging service provider, and storing any message status delivery returned my by the message exchange;

whereby said the messaging users who sent a messaging device originated message receives a reply message on his messaging device.

28. (Currently Amended) A system for developing, analyzing, deploying, and monitoring targeted messaging applications, said system comprising:

a plurality of client systems, the client system comprising one or more messaging devices;

a plurality of message service provider systems at least one of which implements a different messaging technology;

a message application server in communication with ~~each of said plurality of the~~ client systems and ~~each of said plurality of the~~ message service provider systems;

wherein ~~said plurality of the~~ client systems ~~are~~ is configured to interface with ~~said the~~ message application server to enable ~~said plurality of the~~ client systems to develop, analyze, test, deploy, and monitor messaging applications, ~~said the~~ messaging applications to generate messages, receive messages from and send messages to ~~said plurality of the~~ message service provider systems, and

wherein ~~said the~~ message application server is configured to determine and route ~~said the~~ messages to ~~said plurality of the~~ message service provider systems regardless of ~~said the~~ message service provider system's implemented messaging technology.

29. (Currently Amended) A ~~system as~~ The system of claim 28, wherein ~~said the~~ message application server further comprises a dialog server configured to execute messaging applications by ~~means of executing~~ an application instructions, to manage substantially simultaneously executed message applications, to store messaging user results and message delivery status and to maintain state and session context across message invocations for messaging users within ~~an~~ messaging application.

30. (Currently Amended) A The system as in ~~of~~ of claim 29, wherein ~~said the~~ message application server further comprises a message exchange in communication with ~~said the~~ dialog server, ~~said the~~ message exchange is configured to ~~to~~ route messages to and from ~~said the~~ messaging service providers.

31. (Currently Amended) A The system as in ~~of~~ of claim 30, wherein ~~said the~~ message application server further comprises a dialog designer in communication with ~~said the~~ dialog server and ~~said the~~ message exchange, ~~said the~~ dialog designer configured to provide an interface to ~~said the~~ client systems to facilitate rapid message application creation, to provide the ability to select ~~the~~ a type of message application, to select the service address for a message application, to scheduling ~~of the~~ message applications for execution, to uploading ~~of~~ messaging user data into lists, to creation ~~of~~

a segments, to downloading of message application result data, to testing of the
message applications.

32. (Currently Amended) A The system as in of claim 29, wherein said the dialog server comprises:

- an execution unit to process the messaging device originated messages and other events;
- a scheduler unit to start and stop the messaging applications or send scheduled events to the execution unit at scheduled times;
- an application service system to manage the executable applications;
- a session system to manage messaging users sessions;
- a user system to manage messaging users properties;
- an opt-out system to manage the opt-in and opt-out status of messaging device addresses;
- an application instruction unit to retrieve and cache required application instructions;
- a bulksend unit to send large pushes to messaging device addresses within an application segment;
- a dialog server in-queue to store messages or events for execution by said the execution unit;
- a message delivery status system to record message delivery errors returned by said the message exchange;
- a monitoring unit to monitor the state of said the dialog server;
- a dialog server database to store information pertaining to said the dialog server;
- a dialog server message detail record database to log all accounting or service level relevant events within said the dialog server;
- a dialog designer interface to connect the dialog server to the dialog designer; and
- a message exchange interface to connect the dialog server to the message exchange.

33. (Currently Amended) A The system as in of claim 32, wherein said the message exchange further comprises:

an out queue to store termination messages and dialog server connection messages;

an outgoing message router to route messages based on the application service address and the messaging device address;

a plurality of outgoing handlers, each for a specific messaging technology, to send messages to a particular messaging service provider gateway;

a plurality of incoming handlers, each for a specific messaging technology, to accept messaging device originated messages from the a particular messaging service provider gateways;

an incoming message router to route messaging device originated message to the dialog server;

an address manager to create, configure, provision and administer application service addresses;

a billing system configured to display MDR logs, to rate and invoice messaging applications;

a monitoring unit to monitor the state of the message exchange;

a message exchange database to handle the data storage needs of the message exchange;

a message exchange message detail record database to log all billing or service level relevant events within the message exchange system;

a dialog server interface to connect the message exchange to the dialog server;

a dialog designer interface to connect the message exchange to the dialog designer; and

a billing MDR database 410 used to hold the MDR records for billing purposes.

34. (Currently Amended) A The system as in of claim 33, wherein said the dialog designer further comprises:

a HyperText Transfer Protocol (HTTP interface to enable said the client systems to access said the message application server;

a Web Service interface to enable said-the client systems to automate access to said-the message application server;

a service layer to implement the core functionality of the dialog designer;

a dialog server interface to connect the dialog designer to the dialog server;

a message exchange interface to connect the dialog designer to the message exchange;

a dialog designer database to store dialog designer transaction information;

a dialog designer data database to store messaging application related information; and

a dialog server message detail record database to store billing and service level operations information.

35-39. (Cancelled)

40. (Currently Amended) A The system as in of claim 28, wherein said-the message service provider systems comprises:

a plurality of messaging devices, each the messaging device having a messaging device address, and

a messaging service provider gateway communicatively connected to said-the messaging application server to provide for aggregation and delivery of said-the messages to said-the messaging device addresses.

41. (Currently Amended) A The system as in of claim 28, wherein said-the plurality of messaging device is selected from the-a group consisting of data enabled cell phones, wireless enabled Personal Digital Assistants (PDA's), instant messaging devices, mobile e-mail devices and interactive TV devices.

42. (Currently Amended) A The system as in of claim 28, wherein said-the client systems comprises a customer relationship management systems.

43-44. (Cancelled)

45. (New) The system of claim 30, wherein the message exchange is further configured to manage service addresses and to perform message billing.

46. (New) The system of claim 31, wherein the dialog designer further comprises a graphical user interface (GUI) design tool component to enable the client systems to develop, analyze, test, and deploy messaging applications.

47. (New) The system of claim 31, wherein the message applications developed using the dialog designer comprise interactive message applications.

48. (New) The system of claim 31, wherein the dialog designer further comprises a client interface component to reside on the client system and a server interface component to reside on the message application server, the client interface component being in communication with the server interface component to enable the client system to access the dialog server.

49. (New) The system of claim 31, wherein the dialog designer is further configured to facilitate reporting on message application transactions.

50. (New) The system of claim 36, wherein the interactive message applications comprise two-way text messaging applications, multimedia messaging applications, instant messaging applications and Macromedia's FLASH based messaging applications.

51. (New) The system of claim 38, wherein the client interface component is a web browser.